DOCUMENT RESUME

ED 296 495 EC 210 259

AUTHOR Ramsey, Roberta S.
TITLE National Trends in Special Education Teacher Competency Testing.
PUB DATE 88
NOTE 34p.; Paper presented at the Annual Convention of the Council for Exceptional Children (66th, Washington, DC, March 28-April 1, 1988). Portions of table 1 may be marginally legible.
PUB TYPE Speeches/Conference Papers (150) -- Information Analyses (070)

EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS *Competency Based Teacher Education; *Disabilities; Educational History; Educational Trends; Elementary Secondary Education; National Competency Tests; National Surveys; *Special Education Teachers; State Standards; *Teacher Certification; *Teacher Qualifications

ABSTRACT

The paper provides a review of the history and current issues concerning competency testing of special education teachers. Among issues identified are the rights of educators versus the rights of the public, which abilities are to be assessed, effects of a decreasing supply of potential teachers, pencil-and-paper assessment versus performance evaluations, and possible discrimination against minority teachers. The origins of the competency testing movement in general education are traced from the early twentieth century to the present. Results of a survey of all states of current practices and plans in competency testing of special education teachers are provided in tabular form. Twenty-six states administer, or are in the process of developing or adopting, specialty area tests in special education. Content usually required in such tests include: basic knowledge and historical aspects, identification and characteristics of special needs students, processing skills, assessment, learning theory, teaching strategies, instructional content, instructional materials, administrative alternatives, and ancillary services. Future possibilities include a national teacher examination. Appended are two tables showing (1) a summary of special education competency tests for all 50 states; and (2) clusters of special education objectives for 15 states that have defined their testing criteria through published objectives. (DB)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED296495

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
☑ This document has been reproduced as received from the person or organization originating it.
☐ Minor changes have been made to improve reproduction quality.
• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

NATIONAL TRENDS IN SPECIAL EDUCATION TEACHER COMPETENCY TESTING

by

Dr. Roberta S. Ramsey

Paper presented at the Annual Convention of the Council for Exceptional Children (66th, Washington, D.C., March 28 - April 1, 1988).

EC 210259

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY
Roberta S Ramsey
TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

NATIONAL TRENDS IN
SPECIAL EDUCATION TEACHER COMPETENCY TESTING
By Dr. Roberta S. Ramsey

Teacher competency testing is the current manifestation of educational reform that has moved across the nation like a tornado. Many educators refuse to recognize that there is a storm, hoping it will pass by with little disturbance in their area and eventually dissipate. Others see the gray funnel coming and are making strides to prepare for its impact; however, they too hope it will dissolve and eventually go away. Still others see it as a reality, some negatively and some positively, both camps having reasons for their perceptions. While leaders and spokespersons for these diverse factions make contrary assertions, there does seem to be a basis of truth on both sides.

Issues

With 49 of 50 states (Alaska is the exception) actively planning or implementing teacher competency testing in some manner (Sandefur, 1988), teacher competency testing is a present day controversial phenomenon, intertwined with many issues. Some see it as a rights issue, that is, the rights of educators versus those of the public. Both state boards of education and state legislative bodies have passed laws mandating teacher competency testing as a result of pressure from the people (Gifford, 1986; Porter & Freeman, 1986; Sandefur, 1986, 1988; Schlechty & Vance, 1981; Starr, 1983). Should the public be appeased by placing test requirements upon teachers and other school personnel? Many educators have found these tests appropriate for professionalism, if they are fair and consistent (Shanker, 1986), while others look upon them as insulting, due to the tests themselves purported to be assessing minimum competencies (McDaniel, 1982; Rudner, 1987). The latter stance derives from the underlying implication in the public mind, which is that incompetent teachers are the major problem affecting student achievement (Farr & Olshavsky, 1980; Haefele, 1980).

Which abilities are assessed is another area of contention to many educators. Those states which test basic skills appear to be questioning the fundamental literacy skills of our present day educators in reading, math, writing, and speaking. Tests that look at professional knowledge or subject

content are posing another question, which is, whether the teacher has a sufficient pedagogical knowledge base to teach in general, and in a specific specialty area in particular (Porter & Freeman, 1986). Test content focused upon professional knowledge or subject content seems to be considered less belittling to teachers, and more in line with tests administered in other disciplines such as law, medicine, pharmacy, forestry, and so on. "Emphasis on testing teacher competence is part of a national thrust that embraces many fields beyond special education" (Ramsey, 1988, p. xiii).

Another issue stems from the gradual, but drastic, change in teacher supply and demand observed in many areas of our country (Cole, 1986). A diminishing pool of teacher preparation candidates is seen by many of our traditionally oriented teacher education colleges (Pascal, 1987; Sedlak & Schlossman, 1986). The central dilemma is that we are now placing higher qualifications upon a pool of available candidates whose numbers appear to have lessened dramatically during the time the public was advocating teacher competency testing (Holmes, 1986).

A related issue appears to be that of available numbers. Though there seems to be a critical nationwide shortage of teachers in the areas of mathematics, science, vocational and industrial subjects, foreign languages, and some categories of special education (i.e., low prevalency exceptionalities), school districts are appraising both quality and quantity of applicants for the other teaching fields (Dunathan, 1979; Witty, 1986). District superintendents report that less qualified applicants comprise the bulk of those available to fill teacher vacancies. There is reported to be no surplus of what superintendents regard as employable teachers; rather, there appears to be a decline of talent in the available pool of applicants (Schechty & Vance, 1981). This infers a need for attracting more highly qualified students into our teacher preparation programs (Gifford, 1986; Schlechty & Vance, 1981).

Historically, the largest number of persons entering the teaching profession have been Caucasian females, primarily of upper-middle and high

socioeconomic class backgrounds, a somewhat lesser number of Caucasian males, and minority males and females of middle and low socioeconomic origins. Many of these people representing the latter groups have gained a professional status by entering the education field (Berry, Noblit, & Hare, 1985; Sedlak & Schlossman, 1986). More recently, members of each of the aforementioned groups possessing the better qualifications have had other professional options made possible for them, such as law, medicine, computers, industry, and the sciences. Higher salaries offered in these fields have made them appear to be more prestigious professions than teaching. Of interest, studies show wealthier, brighter, married females as more likely to leave the teaching profession than their counterparts (Sedlak & Schlossman, 1986). In a study by Berry et al. (1985), primary dissatisfaction was voiced by teachers leaving the profession about discipline, lack of respect, lack of administrative and parental support, bureaucratic intrusions, and the valuing of mediocrity, with low pay and lack of career opportunities also cited. And, of course, the requirement of competency testing is now added by some as a reason for not entering and/or for exiting the teaching profession.

A final issue is that of pencil and paper assessments versus performance evaluations. It has been asserted that written tests do not evaluate important dimensions such as pleasure and confidence in learning, and the development of interpersonal and social competence (Haefele, 1980; Johnson, 1986). Berry et al. (1985) report that school officials are interested in bright, prospective teachers, but that they are not necessarily looking for those with the highest or best academic qualifications. More importantly, their findings pinpointed skills desired to be those of relating to children and parents, organization, discipline, involvement in extracurricular activities, and the ability to withstand pressure. Hilliard (1986) states that important student outcomes, such as work habits, attitudes, and creativity cannot be determined through pencil and paper tests, when entering the field from a teacher training program. In summary, it is pointed out

by Hilliard (1986) that a "competent teacher" has yet to be defined, much less agreed upon by the public and by educators in the field.

Weller (1982) contends that it is possible to develop quantitative measures to assess actual teacher performance on predetermined competencies deemed essential to effective instruction. Sandefur (1988) reports that fourteen states are assessing teacher performance. Again, what a teacher does has yet to gain widespread acceptance in agreement, as common sense dictates that the situation, the age and maturity level of the students, the tolerance level and personality of the teacher, the teacher training orientation, and the needs of the students involved in any instance, all play a part in determining the best solution. There are some best practices that can be identified; however, test critiques are quick to argue that examinees may feign humanistic qualities while being observed, only to resort to more natural behaviors following the assessment sessions.

The professional literature is proliferate about the plight of minority (especially Black) teacher candidates. Cole (1986) contends that measurement is being used to deny access to the teaching profession; thus, Black educators are in danger of being eliminated from the school systems across the country. In many states, certification (i.e., licensure) is withheld until success is shown, that is to say cut-off scores are exceeded, on selected tests. Entrance to teacher preparation schools may be barred as well (Smith, 1984). Furthermore, some states view the effectiveness of teacher preparation institutions by their students' pass or fail scores on teacher competence tests.

A number of Black educators assert that it is more difficult for minority teachers to score well on teacher competency tests, as few Black children and adults tend to fare well on standardized measures (Garibaldi, 1986; Gifford, 1986). Some Black educators challenge educators from other racial backgrounds to show the same effectivensss in personal interactions that they do when working directly with minority (especially Black) students. They point out that, ironically, the number of Black teachers is decreasing while the number of minority students in a given classroom is showing an

increase (Garibaldi, 1986; Porter & Freeman, 1986). Many of these same educators point out the need for intervention during the early school days of potential teacher candidates. They must be taught how to approach standardized tests and succeed in passing them. Not only does this point to the need for becoming more testwise, but it also alludes to the fact that tests geared toward the majority population are inherently biased against minority participants. Therefore, minority teachers must work even harder to overcome barriers. For example, it has been charged that standardized test questions are generally written in the mode of middle class Anglo Saxon language patterns and experiences, and the test content primarily reflects Caucasian culture and interests related to events indigenous to that group. In support of the latter charge, Medley and Quirk (1974) conducted a study which bore fruit upon their hypothesis that higher scores were obtained by Black students when asked questions about Black personalities and historical events related to their culture. The former charge suggests an obvious need for educators to place more emphasis on the teaching of language (e.g., semantics, syntactical form) that would be helpful in overall academics as well as in test performance. Garigaldi (1986) asserts that more emphasis needs to be placed upon skills needed in test-taking, but not at the expense of academic content. He further contends that the development of test-taking skills would heighten academic confidence and reduce fears or apprehensions associated with taking standardized tests of this nature. One traditionally Black college brought its NTE (National Teacher Examinations) pass rate by teacher preparation candidates from five to 95 percent by "fighting failing test scores rather than the test itself" (Spencer, 1986). There is evidence that, historically, the raising of certification standards has not exacerbated teacher shortages; conversely, respect for the profession has been heightened (Sedlak & Schlossman, 1986).

Finally, major leaders in the teaching field have taken the stance that commitment to the profession demands we produce highly qualified and prepared students (Futrell & Robinson, 1986; Shanker, 1986). Gifford asserts that "properly used, well-constructed, correctly standardized measures for prospect-

ive teachers are necessary for the development of the teaching profession and beneficial to the education of our young" (1986, p. 272). Albert Shanker, President of the American Federation of Teachers, has stated that it would be a form of deprofessionalization to exempt teachers from minimum competency testing. Mary Hatwood Futrell, President of the National Education Association, has more recently given support to fair testing of teachers. In summary, testing exists, and the field demands that school districts, higher education, and state department staff address the need.

Origins

Basic skills of prospective teachers were tested in most states during the early twentieth century (Rudner, 1987). This occurred at a time when most teachers had a high school diploma as their terminal training certificate. Teacher testing programs declined as states increased educational requirements (i.e., baccalaureate degrees) for the certification of teachers.

The more recent round of competency testing has its roots in competency-based education which was first directed toward student achievement, or lack of achievement, over 15 years ago. Due to the literacy problems perceived by the citizenry, once these high school graduates exited the school doors, one solution that gained wide applause was that of writing goal statements specifying the knowledge expected of a graduate from our public education system (Farr & Olshavsky, 1980; Sandberg, 1979). This action was viewed favorably by both the public and by school personnel.

Because of an actual over-supply of teachers in some areas of the country, as well as the public's demand for more accountability in the education of our nation's youth, the populace in many states began questioning the skills of their educators (Dunathan, 1979; Schlechty & Vance, 1981; Starr, 1983). Competency-based teacher certification requirements and the tying of identified competencies to approved education programs were two approaches attempted (Krajewski, 1979; Villeme, 1977, 1982). In addition, available standardized tests such as the Scholastic Aptitude Test (SAT), California Achievement Test (CAT), American College Testing Program (ACT), National Teacher Examinations (NTE), and the Pre-Professional Skills Test (PPST) were identified for

use in admittance and/or at the exit point of teacher preparation programs, and sometimes by states to use test results for initial certification standards (Sandefur, 1984; Rudner, 1987). Thus, these tests may be applied to evaluate general knowldge as well as pedagogical acquisitions.

The predominantly used test for beginning teachers is the NTE, which encountered validity concerns shortly after inception in 1940. The validity concern has addressed the use of appropriate test content and the setting of accurate cut-off scores (Anderson, 1988). Johnson and Prom-Jackson (1986) ask if we are achieving what we think we are through the administration of this test to educators. Flanagan asked this question as far back as 1941, and others have raised it since. It has been charged that the NTE were developed to provide information about candidates' knowledge and skills acquired through teacher training programs. In light of the curriculum reform being carried out in teacher preparation programs, "it cannot be assumed that the objectives and content of teacher-training curricula reflect the proficiency areas or levels possessed by capable entry-level teachers" (Gifford, 1986, p. 261). "Educators do not always agree on what constitutes requisite professional knowledge or effective pedagogy, and there is even less agreement on the role of educational orientations and beliefs in effective teaching" (Porter & Freeman, 1986, p. 287).

In addition, the question about differences in the effects on students when taught by persons with different patterns of scores on these examinations has surfaced many times (Flanagan, 1941; Haefele, 1980; McDaniel, 1977). Byrne (1983, p. 2) was quoted by Porter and Freeman (1986) as stating, "How much teachers know has little effect on how much pupils learn." Conversely, other studies have shown a convincing relationship between specific test scores and quality of instruction (Flanagan, 1941). Johnson and Prom-Jackson (1986) contend that the NTE are designed to measure knowledge generally thought to be possessed by an educated person, and the professional knowledge that a beginning teacher would typically be expected to have. There is no claim by the Evaluation Testing System (ETS), developers of the NTE, that scores from

these tests predict adequate performance as a teacher. Ironically, the ETS has repeatedly advised educational staff of the fallacy of applying results from these tests when determining the compensation, retention, termination, advancement, or change in provisional employment status of teachers once they are employed (Johnson & Prom-Jackson, 1986). Furthermore ETS requires that each state choosing to administer the NTE conduct a content validity study (Gifford, 1986). The ETS contends that while NTE scores serve as an important part of a teacher's professional resume, they are only one piece of information and should be considered in that respect.

Competence Testing in Special Education

Competence testing of teachers by states across the nation is accomplished in a variety of ways. Some states test both general and special educators alike on basic skills and/or professional knowledge. Other states administer the basic skills and/or professional knowledge assessments along with subject area specialty tests. Some states issue endorsements to teaching fields upon completion of approved programs in special education, while others add endorsements following completion of initial certification requirements. Standardized tests may be given to determine entry to a teacher preparation program, or upon exit. Some states test teachers for initial certification only; others test to recertify practicing teachers as well. Any number of combinations can be found (Sandefur, 1986).

A survey was performed to determine 1) which states test special educators with subject area specialty tests, and 2) the objectives developed for these tests by which special educators are directed to study. States that test by subject area assess special education conceptual knowledge, and the objectives specify content that is required to be known for evaluation purposes.

Responses to the inquiry were received from 46 states. Follow-up telephone calls were made to state officials when further clarification was needed. Information was assembled, checked for consistency with the recent publication of the Office of Educational Research and Improvement, U.S. Department of Education, entitled What's Happening in Teacher Testing: An Analysis of State Teacher Testing Practices (Rudner, 1987).

Table 1 displays a listing of all states, and indicates whether specialty area tests in special education are administered. Exceptionality categories tested are listed, along with information regarding standardized or customized tests and the producers of the tests.

States that use specialty area tests do so in a number of ways. Some use customized tests developed through the services of the National Evaluation System (NES). A substantial number of states administer the Mental Retardation (MR) Test and/or the generic Special Education (SE) test along with the Core Battery and Professional Knowledge tests of the NTE.

Twenty-six states administer, or are in the process of developing or adopting, specialty area tests in special education. Of these, eight use customized, specialty developed tests. Customized tests may be developed in cooperation with NES or by the state solely (as a project within that state). Another thirteen states give the NTE-MR or generic NTE-SE test through the services of ETS, and/or are actively studying the more recently developed tests by ETS for other special education exceptionality areas. The remaining five states are still under study.

Three years ago, eight states contracted with ETS for the development of special education subject area tests in Visual Impairments, Hearing Impairments, Orthopedically Disabled, Learning Disabled, and Emotionally Disturbed. Arkansas presently administers the NTE-MR test, and will complete validation in Spring of 1988 on tests for the teaching areas of Visually Impaired, Hearing Impaired, Learning Disabled, and Emotionally Disturbed. Oregon has established cut-off scores for the generic Special Education test. Mississippi and North Carolina are anticipating the completion of validation efforts March 1988, and plan to thereafter implement subject area tests in Visually Impaired, Hearing Impaired, Orthopedically Disabled, Emotionally Disturbed, and (in North Carolina) Learning Disabled. New York, presently a user of the NTE-MR test, has completed its validation studies for Hearing and Visually Impaired, and will be administering these tests in March 1988. Likewise, South Carolina and Virginia have finished validation studies; South Carolina will commence with the administration of tests in all five new testing areas in March 1988, while Virginia

will do so in the Spring or Fall of 1988. Indiana and Nevada will arrive at a decision during Spring 1988 for the use of the special education tests, and Ohio, Michigan, and New Jersey are possible users in the future.

Validation consists of having two independent panels review the test booklets. Teacher educators are asked to identify which items reflect what is taught to teacher preparation students. Practicing teachers are asked to determine relevant and irrelevant test items. Items identified at a preset level considered valid by both panels are scored, whereas items not considered valid, though answered by teachers when taking the competency test, are left unscored. Cut-off scores are thus adjusted in line with content validity (Stewart, 1988).

Fifteen states have defined their criteria for testing through published objectives. Table 2 contains clusters of abbreviated objectives which were obtained from the survey responses. The clusters of objectives are assigned to a topical area in the field of special education content, and correspond with the text sections in the Preparatory Guide for Special Education Teacher Competency Tests (Ramsey, 1988), a one-volume study manual recently published by Allyn and Bacon, Inc. As may be seen by the large number of objectives comprising the test content of many state evaluations, a substantial amount of study materials must be covered by professionals when preparing to take a test of this magnitude. A teacher preparing to take a state competence test would be required to assemble a massive amount of professional literature for effective study. Thus, essential information from textbooks and resources in the field was compiled in a synthesized or summarized form for this first of its kind preparatory study guide.

The content reflected by objectives received from states is displayed within clustered sections in Table 2. These major sections include the following: 1) basic knowledge and historical aspects, 2) identification and characteristics of special needs students, 3) processing skills, 4) assessment, 5) learning theory, 6) teaching strategies, 7) instructional content, 8) instructional materials, () administrative alternatives, and 10) ancillary services. Since these clusters comprise the majority of objectives listed in the materials received from state

departments of education, there appears to be a need for demonstrating competence in these areas.

Basic knowledge and historical aspects. A review of objectives in this section emphasizes the need for special educators to be familiar with the mandates (i.e., laws, regulations, policies) that apply to or have a bearing upon special education operations and procedures in their respective states and local districts. The federal mandates upon which state and local levels are based are overwhelmingly required in objectives issued. Knowledge of the major provisions of public laws, in particular Public Law 94-142, must be studied. The objectives are generic in perspective, and include the need for a philosophical orientation. Moreover, this section includes the professional obligation all educators have for assuring that handicapped children receive a free, appropriate public education for ethical as well as mandated reasons.

Characteristics. It appears important that educators be able to recognize characteristics of a physical, emotional, developmental, behavioral, and educational nature which occur to the extent that special services are required. Objectives stipulate the need for special educators to know major identifiable characteristics by which they are generally associated with a particular exceptionality category for treatment. All exceptional categories included in Public Law 94-142 were listed in state objectives. The category of Gifted was mentioned by the majority of states; however, a lesser number of objectives addressed this category. Very few state objectives saw the need for prevalency estimates and numbers of students served to be included in content reviewed.

Processing skills. It appears important that educators know characteristics that are typical of all children as they progress through developmental stages. Students whose characteristics deviate from those of the normal population may be in need of special services, and should be recognizable to special educators. Language and motor skills are particularly important in recognizing early cognitive development, or the lack of it.

Questions have been raised concerning the relationship between perceptual skills of students and academic achievement. The majority of assessment tools used to diagnose processing deficits have proven inadequate. However, it is a fact that learners must receive information given them through receptive channels (e.g., visual, auditory, haptic); use integrative skills to organize, store, react to, or retrieve acquired information; and make responses through expressive channels (i.e., motoric, written, spoken). The use of perceptual avenues through which students acquire, integrate, and express information is referred to as the learner's information processing skill.

Though this section is the least agreed upon of the ten sections, objectives reviewed emphasize the fact that special educators need to be able to identify strengths and weaknesses in their students' processing skills. The objectives present in this area tend to focus upon the need for familiarity with specific activities or teaching strategies that might be used to develop these skills further while students continue to pursue academic studies.

Assessment. All children enrolled in our educational system will experience testing throughout their schooling, whether it be preschool sensory screenings, teacher-made quizzes, or annual standardized assessments. Many special needs students are initially identified through the use of these tests, and subsequently referred for further assessment.

Testing presents new parameters from the time that a student is first suspected of having a condition which handicaps him in the educational arena. Objectives from this section pinpoint the need for teachers in special education to know appropriate evaluation procedures for identification, placement, and program purposes. The full, individualized assessment procedure, using instruments validated to test disability areas by those serving on the multidisciplinary team, must be fully understood in order to operate within the mandates of the law, and ultimately, to make important educational decisions about a student.

Objectives received specify the need for teachers in the field of special education to possess sufficient knowledge to be able to determine quantitative dimensions such as the validity and reliability of tests, to recognize sound test content, and to choose appropriate tests for specific purposes.

Special educators must be well trained in the administration, scoring, and interpretation of a wide variety of evaluative instruments. Furthermore, they need to know how to use the results of tests which must be administered and scored by other professionals. Knowledge of observational methods used to assess academic and social behavior is still another requirement for the special education teacher.

Assessment plays a vital role in the initial diagnosis, the decision to place, the planning of program goals and objectives, and ongoing diagnostic evaluation of the exceptional student. There seems to be a great amount of agreement for the demonstration of conceptual knowledge in this realm across states.

Learning theory. The teacher of exceptional students has a need for knowledge that goes beyond the content of the subjects taught and the characteristics of normal child development. Each of the students by definition requires special education services because of a handicapping condition, whether induced by physical, intellectual, or emotional causes. It is the teacher's responsibility to use whatever techniques and strategies possible to develop each child's learning potential to the fullest. In order to accomplish this goal, the teacher must have a thorough comprehension of the learning process, including the assimilation, storage, retrieval, and application of information. Above all, the practicing teacher must remain an effective facilitator for children who may otherwise become discouraged by slow or limited academic success.

Objectives received indicate a need for behavior modification procedures to be known and understood. A teacher must be able to apply behavior analysis in a scientific manner with a view toward understanding behavior and its functional relationship to environmental events.

The effective teacher will acquire a conceptual knowledge of learning theory and will utilize the principles in a wide range of teaching situations. Students will be assisted toward generalizing behaviors across settings. Further, the teacher will model correct procedures and advocate their use by other school personnel.

Teaching strategies. Teachers are generally trained to teach the masses of students who progress through our American educational system. Special educators must not only be taught the fundamental processes and procedures used in general education, but they must be able to apply specialized methodology which is needed by exceptional students, and their specialized approaches must be tailored to meet individual needs. After all, these students are receiving delivery of services in a special education setting because they were unable to make sufficient progress in a regular classroom.

A review of objectives within this section underscores the need for special techniques when teaching basic skills. Students vary in their rate of learning, need for routine, ability to memorize or to retain what they learn, reasoning skills, and ability to generalize newly acquired concepts. Students must be able to progress from simple to more complex levels within a task hierarchy, to experience success, and to become independent learners to the greatest extent possible.

A premium appears to be placed upon the occurrences of effective communication between teacher and students. Clarity of expression is seen as essential when instructing, as is the appropriateness of feedback.

Thus, the special educator must demonstrate knowledge about a wide variety of instructional techniques and approaches. This teacher must be able to recognize specific needs, must possess diagnostic capabilities, and must make the necessary environmental and instructional adaptations, all on an individual basis.

Instructional content. The special educator must have a thorough understanding of the content matter that is taught from kindergarten through twelfth grade for several important reasons. First, students will be instructed whose functioning abilities could span all grade levels, and, second, the special education teacher is responsible for being able to use unique techniques and approaches to teach content in required subject areas. The actual content and sequence of the concepts which the special needs learner must be taught is the same as that used with the regular student.

However, by virtue of the fact that the student has been determined eligible for and placed in special education, special and related services must be conceptually understood and applied.

The content areas of reading (vocabulary, decoding skills, comprehension), math (fact mastery, computational operations, reasoning, verbal problem solving), language arts, and social skills training are broad in scope, entail a specific instructional sequence that all learners must follow, and are basic to being able to succeed in other subject areas. Objectives in this section identify the necessity for a full and complete understanding by the special educator of both the sequential skills hierarchies, and the developmental stages through which learners progress, as well as the need to plan, predict, diagnose, and select from a variety of remedial techniques.

Instructional materials. By definition, exceptional children are those who require the use of special instructional methods and materials in order to achieve their academic potential. Therefore, the selection of appropriate instructional materials is contained within the objectives of most states. The inclusion of objectives within this section highlights the necessity for training in this area.

The teacher of special needs students knows that materials must be flexible in order to cover the repetitive practice needs of this population. Furthermore, well integrated curriculum materials will reinforce math, reading, spelling, and writing skills. There is agreement across states that the general characteristics of good instructional materials, such as quality, durability, and utility should be understood. Due to unique needs of individuals, some materials must be teacher-made or teacher-adapted, and thus basic requirements for the construction of such materials as flashcards, games, and charts have to be recognized.

Objective statements concur with the notion that an effective teacher will be able to determine the instructional level and content of materials chosen, and consideration for physical, sensory, social, and intellectual strengths and limitations of students must be shown. The special educator who can effectively demonstrate all these things will find the job easier because of the support which sound and effective instructional materials can lend to the educational program.

Administrative alternatives. The need for a placement decision occurs when it is decided by the multidisciplinary team that a student requires special education (i.e., specially designed instruction which meets the unique needs of an exceptional child) and related services (e.g., special transportation, psychological services, physical and occupational therapy, recreation, medical treatment, and counseling). This placement decision will involve the consideration of factors such as degree and severity of the student's handicapping conditions, current performance levels, the extent of specialized teaching strategies and practices, as well as equipment and materials needed for the student to proceed.

The special education teacher serves as a member of the multidisciplinary team. Objectives received from states unanimously uphold the fact that the special educator is involved in making decisions about placements for special needs students, and, therefore, must know the placement options in the cascade system of services thoroughly.

The law requires placement in the student's least restrictive environment. As a member of the multidisciplinary team, it is the responsibility of the special education teacher to assist in monitoring the development of adaptive, social, cognitive, motor, and language skills, and to recommend placement in a lesser restrictive environment when appropriate. Program exit criteria must also be in place and utilized accordingly.

Ancillary services. Objectives stress the need for a cognitive understanding about the establishment and maintenance of close contact and communication between the district staff, each base school, and the various specialists (or consultants) providing ancillary services. The principles and methods of special education must be shared with regular educators, and tenets and practices of regular education must be conveyed to special educators.

There is a requirement by all states listed that the referral process be understood and practiced according to specified legal procedures. Furthermore, the services that can be given by parents and professional organizations, must be known to all in order for maximum education for exceptional students to occur.

Future Perspectives

More states are expected to follow the trend of competency testing in the specialty areas of teachers. The Evaluation Testing System (ETS) is actively contracting with states, both the original group of eight and others who are currently adopting one or more of the five more recently developed tests in special education.

Among those states testing in the special education realm, four employ the services of the National Evaluation System (NES). In two of these states, Georgia and Alabama, litigation has been brought by major state education forces charging invalid uses of customized teacher competency tests. It is predicted that more states, like Georgia, will develop their own tests, or join in the coalition of states in adopting one or more of the nine* special education tests available through ETS. In any case, validation appears to be the key component, and must be performed to fulfill the letter of the law.

As more states join the teacher testing movement, the demand is being made by educators for an agreement on reciprocity. A number of states have established an Interstate Certification Compact based on study and/or experience completed in one state accepted as satisfying another state's study and experience requirements. This will need to be addressed in relation to teacher competency testing within specialty areas such as special education.

Shanker (1986) forecasts an eventual national teacher examination, similar to those used for bar and medical licensure. The examination would be developed by a commission composed of outstanding educators and similarly qualified people in other professions who have had some experience in administering professional examinations. To update and administer the examination, it is further recommended that there be a national Teachers' Professional Practices Board composed of teacher practitioners.

*The nine NTE tests, produced by ETS, include: Special Education, Mental Retardation, Audiology, Speech Pathology, Visually Impaired, Hearing Impaired, Learning Disabled, Emotionally Disturbed, and Orthopedically Impaired.

This national examination would consist of three parts. First, candidates would be required "to think, to write, to organize thoughts, and to persuade" (Shanker, 1986, p. 413). Second, a separate assessment would test knowledge of pedagogy, educational issues, and the ability to apply educational principles to different student developmental needs and learning styles. The third part of the examination would consist of a supervised internship program extending from one to five years.

Some special educators envision the Council for Exceptional Children (CEC) as the ultimate overseer of a national test in special education, should one be required. Weintraub (1987) purports this body to be the most qualified to monitor the certification of special educators.

Whether or not states will be willing to relinquish their autonomy over teacher competency testing in their respective jurisdictions is yet to be actively addressed. After all, some states have just sighted the tornado, and are fending it off as a temporary intrusion. Others are digging in for the cyclical effect that education typically experiences. And, of course, there are those states which regard teacher competency testing as a legitimate, professional activity, but totally under the auspices of the state. Right now it appears to be a month-by-month, wait-and-see game, with all ears atuned to forecasts.

Table 1.

Summary of Special Education
Competency Tests, March 1988

States	Special Education Certification Tests																		Implementation		
			Yes					Type													
	Yes	No	MR	SLD	SED	VI	HI	DEAF	DEAF BL.	PH/ OI	OHI	SPI	MULT	G & TAL.	OTHER	NTE	CUS	IN PLACE	UNDER STUDY	DATE
Alabama	x		x	x	x	x	x	x	x	x	x	x	x	x	LarChnc Hand		NES x	x	x	1981
Alaska		x																		
Arizona		x																		
Arkansas	x		x	?	?	?	?									ETS x				?
California		x																		
Colorado		x																		
Connecticut		x																		
Delaware		x																		
Florida																			x	Fall 1988
Georgia	x		x/?	?	?										Intarr x/?		NES St/x	x	x	1975/1989
Hawaii	?														SE					
Idaho		x																		
Illinois	x		x	x	x	x	x	x		x		x			TMR & EMR		State x			July 1988
Indiana	x		x/?	x/?	x/?	x/?	?			x/?					EMR TMR	ETS ?	NES x	x	x	1986/ Mar. 1988
Iowa		x																		
Kansas		x																		
Kentucky	?	x													?Lng& BehDisor				x	?
Louisiana	x		x													ETS x		x		1978
Maine		x																		
Maryland	x														SE	ETS x		x		1987
Massachusetts																			?	
Michigan	?	x	?	?	?	?	?			?						?			x	1993
Minnesota		x																		
Mississippi	x		x		?	?	?	?		?		x			Audiol	ETS x		x	x	1975/ Mar. 198
Missouri		x																		
Montana		x																		
Nebraska		x																		
Nevada	?	x	?	?	?	?	?			?						?			x	Decision Spr. 198
New Hampshire		x																		
New Jersey	?	x	?	?	?	?	?			?									x	?
New Mexico		x																		
New York	x		x			x	x									ETS x		x		1987/ Mar. 198
North Carolina	x		x	?	?	?	?			?		x						x	x	?
North Dakota		x																		
Ohio	?		?	?	?	?	?			?						?			x	1991
Oklahoma	x		x	x	x	x	Not SE x			x							NES x	x		1992
Oregon	x														SE	ETS x			x	
Pennsylvania	x					x	x					x		x	Men/ PhysH	ETS x		x		1987
Rhode Island		x																		
South Carolina	x		x	x	x	x	x			x		x			SE	ETS x				
South Dakota		x																		Mar. 198
Tennessee	x					?	?													
Texas	x		?	?	?	?	?			?		?			Non-Cate	ETS x			x	1990
Utah	x					x	x								Generic Autist		NES x		x	
Vermont		x													Resourc SevHand		x	x		
Virginia	x		x																	
Washington		x																	x	?
West Virginia	x		x	x	x					x		x			PreSch Hand		State x	x		1986
Wisconsin	?	x																		
Wyoming		x																		

? Indicates items that have not yet been decided or disclosed.

Table 2.

Clusters of Special Education State Objectives

ABBREVIATED OBJECTIVES	STATES														
	ALA	GA	ILL	IND	LA	MISS	MD	N.C.	N.Y.	OKLA	PA	S.C.	TENN	VA	W. VA
SECTION I - Basic Knowledge & Historical Aspects															
1. Major Historical Developments	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
2. Philosophy of Special Education	X	X	X	X	X	X	X	X		X	X	X	X	X	X
3. Major Principles and Regulations of Public Law 94-142	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
4. Parent Involvement	X		X	X	X	X	X	X		X	X	X	X	X	X
5. Professionally Ethical and Unethical Behavior	X	X	X	X	X	X	X	X				X	X	X	
Glossary															
SECTION II - Identification and Characteristics															
1. Learning Disabled	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
2. Mentally Retarded	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
3. Emotionally Disturbed	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
4. Speech Handicapped	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
5. Hearing Handicapped	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
6. Visually Handicapped	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
7. Physically Disabled/Other Health Impaired	X		X	X	X	X	X	X	X	X	X	X	X	X	X
8. Multihandicapped	X	X	X	X	X	X	X	X	X		X	X	X	X	X
9. Gifted and Talented	X				X	X	X	X	X			X	X	X	X
10. Prevalency Estimates and Numbers Served by Category								X	X		X				
Glossary	X				X	X	X	X			X	X	X	X	X
SECTION III - Processing Skills															
1. Activities Evaluating Auditory Perception Skills	X	X	X	X						X	X				X
2. Activities Evaluating Auditory Receptive Skills	X	X	X	X						X	X				X
3. Activities Strengthening Visual Perception Skills	X	X	X	X						X	X				X
4. Activities Strengthening Integrative Skills	X		X	X						X	X				X
5. Components of Language	X	X			X	X	X			X	X	X	X	X	
6. Different Meanings Given Auditory and Visual Stimuli	X	X								X	X				
7. Tactile, Kinesthetic, and Haptic Discrimination	X	X	X	X	X	X	X	X		X	X	X	X	X	X
8. Stages of Normal Motor and Language Development	X		X	X	X	X	X	X		X	X	X	X	X	X
Glossary															

Table 2 (continued)

Clusters of Special Education State Objectives

ABBREVIATED OBJECTIVES	STATES														
	ALA	GA	ILL	IND	LA	MISS	MD	N.C.	N.Y.	OKLA	PA	S.C.	TENN	VA	W. VA
SECTION IV - Assessment															
1. Due Process Procedures	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
2. Distinguish Between Group and Individual Tests		X		X	X	X	X			X	X	X	X	X	
3. Norm-Referenced and Criterion-Referenced Tests	X	X		X	X	X	X	X		X	X	X	X	X	X
4. Formal Versus Informal Tests	X	X	X	X	X	X	X	X		X	X	X	X	X	X
5. Interindividual and Intraindividual Discrepancies	X	X		X	X	X	X	X		X	X	X	X	X	X
6. Test Validity	X	X		X	X	X	X	X		X	X	X	X	X	X
7. Test Reliability	X	X		X	X	X	X	X		X	X	X	X	X	X
8. Raw Scores and Derived Scores	X	X		X	X	X	X	X		X	X	X	X	X	X
9. Test Administration and Interpretation	X	X		X	X	X	X	X	X	X	X	X	X	X	X
10. Feasibility Factors in Selecting Tests	X	X		X	X	X	X	X	X	X	X	X	X	X	X
11. Define & Compare Types of Tests		X	X	X	X	X	X	X		X	X	X	X	X	X
12. Intelligence Tests	X	X	X	X	X	X	X	X		X	X	X	X	X	X
13. Achievement and Diagnostic Tests	X	X	X	X	X	X	X	X		X	X	X	X	X	X
14. Adaptive Behavior Measures	X		X	X	X	X	X				X	X	X	X	X
15. Visual-Motor, Auditory Perception, Motor Proficiency	X		X	X	X	X	X	X		X	X	X	X	X	X
16. Language and Speech Tests	X	X	X	X	X	X	X	X		X	X	X	X	X	X
17. Auditory Acuity	X	X	X	X	X	X	X	X		X	X	X	X	X	X
18. Visual Acuity	X	X	X	X	X	X	X	X		X	X	X	X	X	X
19. Vision and Hearing Tests	X		X	X	X	X	X	X		X	X	X	X	X	X
20. Social Behavior	X	X	X	X	X	X	X	X		X	X	X	X	X	X
21. Systematic Observation-Academic & Social Assessment	X	X			X	X	X	X		X	X	X	X	X	X
Glossary															

Table 2 (continued)

Clusters of Special Education State Objectives

ABBREVIATED OBJECTIVES	STATES														
	ALA	GA	ILL	IND	LA	MISS	MD	N.C.	N.Y.	OKLA.	PA	S.C.	TENN	VA	W. VA
SECTION V - Learning Theory															
1. Selection of Behavior Modification Procedures	X	X		X	X	X	X	X	X	X	X	X	X	X	X
2. Primary Reinforcers		X		X	X	X	X	X	X	X	X	X	X	X	X
3. Secondary Reinforcers		X		X	X	X	X	X	X	X	X	X	X	X	X
4. Advantages & Disadvantages for Types of Reinforcers	X			X	X	X	X	X	X	X	X	X	X	X	X
5. Schedules of Reinforcement	X	X		X	X	X	X	X	X	X	X	X	X	X	X
6. Punishment Techniques	X	X		X	X	X	X	X	X	X	X	X	X	X	X
7. Contingency Management	X	X		X	X	X	X	X	X	X	X	X	X	X	X
8. Backward Chaining	X	X		X	X	X	X			X		X	X	X	
9. Dimensions of Discrimination Tasks	X	X		X	X	X	X			X		X	X	X	
10. Transfer of Learning & Development of Generalization	X	X		X	X	X	X			X		X	X	X	X
11. Observational Learning	X	X		X	X	X	X			X		X	X	X	X
12. Acquisition of New Concepts	X			X	X	X	X			X		X	X	X	X
13. Storage, Rehearsal, and Retrieval of Information	X	X		X	X	X	X			X		X	X	X	X
Glossary															
SECTION VI - Teaching Strategies															
1. Individual Learning Styles		X	X	X				X							X
2. Learning Environments	X	X		X				X	X	X	X				X
3. Selective Attention	X	X		X	X	X	X	X		X	X	X	X	X	X
4. Task Analysis and Criterion Measurement	X	X	X	X	X	X	X	X		X	X	X	X	X	X
5. Task Levels of Difficulty	X	X	X	X	X	X	X	X		X	X	X	X	X	X
6. Rate of Learning	X	X		X	X	X	X	X		X	X	X	X	X	X
7. Intentional Learning and Memory Categories	X	X		X	X	X	X	X		X	X	X	X	X	X
8. Massed and Distributed Practice	X	X		X	X	X	X	X		X	X	X	X	X	X
9. Alternative Response Patterns		X		X	X	X	X	X		X	X	X	X	X	
10. Independent Learners	X	X		X				X		X	X				
11. Communication Between Sender and Receiver		X	X	X	X	X	X		X		X	X	X	X	
12. Response to Underlying Feelings		X	X	X	X	X	X		X		X	X	X	X	
13. Immediate and Delayed Feedback		X	X	X	X	X	X		X		X	X	X	X	
14. Facilitation of Positive Student Behavior	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
15. Development of Responsible Behavior	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Glossary															

Table 2 (continued)

Clusters of Special Education State Objectives

ABBREVIATED OBJECTIVES	STATES														
	ALA	GA	ILL	IND	LA	MISS	MD	N.C.	N.Y.	OKLA	PA	S.C.	TENN	VA	W. VA
SECTION VII - Instructional Content															
1. Cognitive Developmental Stages	X	X	X		X	X	X	X		X	X	X	X		X
2. Relationship Between Reading & Prereading Skills	X	X	X							X	X				X
3. Basic Reading Skills and Teaching Techniques	X	X	X							X	X				X
4. Levels of Comprehension Skills		X	X							X	X				X
5. Analysis and Synthesis		X								X	X				X
6. Purposes for and Levels of Reading	X	X								X	X				X
7. Development of Math Readiness Skills	X	X	X							X	X				X
8. Development of Number Concepts	X	X	X							X	X				X
9. Basic Math Operations and Teaching Techniques	X	X	X							X	X				X
10. Problem-Solving Math Skills	X	X	X							X	X				X
11. Language Usage and Math Instruction	X	X	X							X	X				X
12. Components of Written Language	X	X	X							X	X				X
13. Development of Language Skills		X	X		X	X	X	X		X	X	X	X		X
14. Development of Social-Interpersonal Skills	X	X	X	X							X			X	X
Glossary															
SECTION VIII - Instructional Materials															
1. Selection and Evaluation of Core Materials	X	X		X	X	X	X	X		X	X	X	X	X	X
2. Instructional Versus Functioning Levels	X	X		X	X	X	X	X		X	X	X	X	X	X
3. Relevance and Utility of Instructional Materials	X	X		X	X	X	X	X		X	X	X	X	X	X
4. Cost, Quality, and Durability of Materials	X	X		X	X	X	X	X		X	X	X	X	X	X
5. Ease of Storage and Availability of Materials	X	X		X	X	X	X	X		X	X	X	X	X	X
6. Games, Teaching Aids, and Equipment	X	X		X	X	X	X	X		X	X	X	X	X	X
Glossary															

Table 2 (continued)

Clusters of Special Education State Objectives

ABBREVIATED OBJECTIVES	STATES														
	ALA	GA	ILL	IND	LA	MISS	MD	N.C.	N.Y.	OKLA	PA	S.C.	TENN	VA	W. VA
SECTION IX - Administrative Alternatives															
1. Types of Special Class Placement	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
2. Regular Classroom		X		X	X	X	X	X	X	X	X	X	X	X	X
3. Regular Classroom with Consultant		X		X	X	X	X	X	X	X	X	X	X	X	X
4. Resource Room	X	X		X	X	X	X	X	X	X	X	X	X	X	X
5. Full-Time Instruction	X	X		X	X	X	X	X	X	X	X	X	X	X	X
6. Special School	X	X		X	X	X	X	X	X	X	X	X	X	X	X
7. Vocational Training	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Glossary											X				
SECTION X - Ancillary Services															
1. Referral for Special Education Services	X	X	X	X	X	X	X	X		X	X	X	X	X	X
2. Support Service Personnel	X		X	X	X	X	X	X	X	X	X	X	X	X	X
3. In-Service Training	X	X		X				X		X	X				X
4. Professional Organizations	X	X	X	X	X	X	X	X		X	X	X	X	X	X
5. Professional Publications	X	X	X	X				X		X	X				X
6. Community-Based Facilities	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
7. Community Family Services	X		X	X	X	X	X	X	X	X	X	X	X	X	
Glossary															

References

Berry, B., Noblit, G. W., & Hare, R. D. (1985). The qualitative critique of teacher labor market studies (Report No. SP 026 444). Research Triangle Park, N.C.: Southeastern Regional Council for Educational Improvement. Supported in part by the National Institute of Education, Department of Education. (ERIC Document Reproduction Service No. ED 261 030)

Byrne, C. J. (1983). Teacher knowledge and teacher effectiveness: A literature review, through analysis, and discussion of research strategy. Paper presented at the 14th annual convention of the Northeastern Educational Research Association, Ellenville, N.Y.

Cole, B. P. (1986). The Black educator: An endangered species. The Journal of Negro Education, 55(3), 326-334.

Dunathan, A. T. (1979). Midwest schools face shortages of good teachers. Phi Delta Kappan, 61(2), 121-123.

Farr, R., & Olshavsky, J. E. (1980). Is minimum competency testing the appropriate solution to the SAT decline? Phi Delta Kappan, 61(8), 528-536.

Flanagan, J. C. (1941). A preliminary study of the validity of the 1940 edition of the National Teacher Examinations. Schools and Society, 54(1387), 59-64.

Fox, D. J. (1986). NTE National Teacher Examinations (4th ed.). New York, N.Y.: Prentice Hall Press.

Futrell, M. H., & Robinson, S. P. (1986). Testing teachers: An overview of NEA's position, policy, and involvement. The Journal of Negro Education, 55(3), 397-404.

Garibaldi, A. M. (1986). Sustaining Black educational progress: Challenges for the 1990s. The Journal of Negro Education, 55(3), 386-396.

Gifford, B. R. (1986). Excellence and equity in teacher competency testing: A policy perspective. The Journal of Negro Education, 55(3), 251-273.

Haefele, D. L. (1980). 'How to evaluate thee, teacher--Let me count the ways.' Phi Delta Kappan, 61(2), 121-123.

Hilliard, A. G., III. (1986). From hurdles to standards of quality in teacher testing. The Journal of Negro Education, 55(3), 304-315.

Holmes, B. J. (1986). Do not buy the conventional wisdom: Minority teachers can pass the tests. The Journal of Negro Education, 55(3), 335-346.

Johnson, S. T., & Prom-Jackson, S. (1986). The memorable teacher: Implications for teacher selection. The Journal of Negro Education, 55(3), 272-283.

Krajewski, R. (1979). Here's how to prepare for the rush toward minimum competency. The American School Board Journal, 166(4), 39-40.

Medley, D. M., & Quirk, T. J. (1974). The application of a factorial design to the study of cultural bias in general culture items on the National Teacher Examination. Journal of Educational Measurement, 11(4), 235-245.

McDaniel, T. R. (1977). The NTE and teacher certification. Phi Delta Kappan, 59(3), 186-188.

McDaniel, T. R. (1982). Competency-based teacher certification: Is it really happening? The Teacher Educator, 18(2), 5-9.

Paschal, A. (1987). The qualifications of teachers in American high schools (Report No. N-2547-CSTP). Santa Monica, CA: The RAND Corporation.

Porter, A. C., & Freeman, D. J. (1986). Professional orientations: An essential domain for teacher testing. The Journal of Negro Education, 55(3), 284-292.

Ramsey, R. S. (1988). Preparatory guide for special education teacher competency tests. Needham Heights, MA: Allyn and Bacon, Inc.

Rudner, L. M. (Proj. Dir.). (1987). What's happening in teacher testing: An analysis of state teacher testing practices. Washington, D.C.: Office of Educational Research and Improvement, U.S. Department of Education.

Sandberg, J. H. (1979). K-12 Competency-based education comes to Pennsylvania. Phi Delta Kappan, 61(2), 119-120.

Sandefur, J. T. (1984). Competency assessment of teachers: The 1984 report. Journal of Human Behavior and Learning, 1(3/4).

Sandefur, J. T. (1986) Competency assessment of teachers: The 1986 report. AACTE Briefs.

Sandefur, J. T. (1987). In L. M. Rudner (Proj. Dir.), What's happening in teacher testing: An analysis of state teacher testing practices. Washington, D.C.: Office of Educational Research and Improvement, U.S. Department of Education.

Sandefur, J. T. (1988). In R. S. Ramsey, Preparatory guide for special education teacher competency tests. Needham Heights, MA: Allyn and Bacon, Inc.

Schlechty, P. C., & Vance, V. S. (1981). Do academically able teachers leave education? The North Carolina case. Phi Delta Kappan, 63(2), 106-112.

Sedlak, M., & Schlossman, S. (1986). Who will teach? Historical perspectives on the changing appeal of teaching as a profession (Report No. R-3472-CSTP). Santa Monica, CA: The RAND Corporation.

Shanker, A. (1986). The making of a profession. The Journal of Negro Education, 55(3), 397-404.

Smith, J. O. (1984). The role of Black studies scholars in helping Black students cope with standardized tests. The Journal of Negro Education, 53(3), 334-340.

Spenser, T. L. (1986). Teacher education at Grambling State University: A move toward excellence. The Journal of Negro Education, 55(3), 293-303.

Starr, N. K. (1983). Quality and quantity of applicants for teacher education rapidly diminishing. Education, 104(2), 150-154.

Stewart, J. T. (1988, February). [Telephone Conference, Director, Professional Services, Educational Testing Service].

Villeme, M. G. (1977). The decline of competency-based teacher certification. Phi Delta Kappan, 58(5), 428-429.

Villeme, M. G. (1982). Competency-based teacher certification: Is it really happening? The Teacher Educator, 18(2), 2-4.

Weintraub, F. J. (1987, March). [Interview, Assistant Executive Dierctor, Council for Exceptional Children].

Weller, L. D. (1982). Teacher performance assessment instruments: A "personalized" approach to staff development. The Teacher Educator, 18(2), 10-19.

Witty, E. P. (1986). The memorable teacher: Implications for teacher selection. The Journal of Negro Education, 55(3), 272-283.